

REMARKS

This paper is responsive to the Final Office Action dated April 15, 2009 wherein claims 28, 30 and 31 were rejected, claims 29 and 32 were objected to and claims 1-11, 13, 15, 16, 22, 24-27, and 33 were allowed. By this paper, claims 28 and 30 have been amended. Claims 1-11, 13, 15, 16, and 22-33 remain pending in this application. In view of the following remarks, Applicants request further examination and reconsideration of the present patent application.

Independent claims 28 and 30 have been amended to more specifically recite a composition of an article. No new matter has been added.

Allowable Subject Matter

The Examiner allowed claims 1-11, 13, 15, 16, 22, 24-27 and 33. Applicants wish to sincerely thank the Examiner for the allowance of claims 1-11, 13, 15, 16, 22, 24-27 and 33, and the indication of allowable subject matter in claims 29 and 32 which are objected to as being dependent upon a rejected base claim. Examiner further stated that the claims 29 and 32 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

However, in light of the above amendments and following arguments, Applicants respectfully submit that the remaining claims 23, and 28-32 are in condition for allowance.

35 USC §103

Claims 28, 30 and 31 are rejected under 35 USC 103 (a) as being unpatentable over Markovitz et al., U. S. Patent Number 6359232 (hereinafter "Markovitz"). Applicants respectfully traverse the rejection.

The Markovitz reference does not teach, suggest or disclose each and every aspect of Applicants recited invention as claimed in the amended independent claims 28 and 30. Claims 29, 31 and 32 depend directly or indirectly on claims 28 and 30, and are allowable by virtue of such dependency, as well as for the subject matter they separately recite. Thus, it is respectfully requested that the rejection of claims 28, 30 and 31 under 35 U.S.C. §103(a) be withdrawn.

With regard to independent claims 28 and 30, the Examiner stated that Markovitz teaches an electrical insulating material, particularly for use as groundwall insulation for high voltage stator bars, wherein the electrical insulating material comprises a resin binder and about 2 to about 30wt% of submicron particles of silicon dioxide, aluminium dioxide, titanium dioxide and /or zirconium dioxide, with a particle size of about 0.005 to about 0.05 micrometers; and the resin binder is a thermosetting polymeric material such as epoxy and polyester resins, which includes phenolic epoxy resins and phenolic resin accelerators. The Examiner cited various passages from Markovitz in support of his position. Applicants respectfully disagree with this assessment in light of the current amendment.

Independent claim 28 (amended) of the instant invention recites an article of composite coating for groundwall insulation. The article comprising, *inter alia*, "an electrical component, the electrical component being an electrical conduction winding, stator bar, or a stator piece; and

an electrically insulating layer disposed upon the electrical component, wherein the electrically insulating layer comprises a thermosetting polymer and a nanosized filler having an average largest dimension of less than or equal to about 75 nanometers;

wherein the thermosetting polymer comprises polyurethanes, phenolics, silicones, polycarbonates, polystyrenes, polyarylates, polyarylsulfones, polyethersulfones, polyphenylene sulfides, polysulfones, polytetrafluoroethylenes, polyetherketones, polyether etherketones, polyether ketone ketones, polybenzoxazoles, polyoxadiazoles, polybenzothiazinophenothiazines, polybenzothiazoles, polypyrazinoquinoxalines, polyquinoxalines, polybenzimidazoles, polyoxindoles, polyoxoisindolines, polydioxoisindolines, polytriazines, polypyridazines, polypiperazines, polypyridines, polypiperidines, polytriazoles, polypyrazoles, polycboranes, polyoxabicyclononanes, polydibenzofurans, polyphthalides, polyacetals, polyanhydrides, polyvinyl ethers, polyvinyl thioethers, polyvinyl alcohols, polyvinyl ketones, polyvinyl halides, polyvinyl nitriles, polyvinyl esters, polysulfonates, polysulfides, polythioesters, polysulfonamides, polyureas, polyphosphazenes, polysilazanes, or combinations comprising at least one of the foregoing thermosetting polymers;

wherein the nanosized filler comprises a mineral filler comprising asbestos, ground glass, kaolin, silica, calcium silicate, calcium carbonate, magnesium oxide, zinc oxide, aluminum silicate, calcium sulfate, magnesium carbonate, sodium silicate, barium carbonate, barium sulfate, mica, talc, alumina trihydrate, quartz, wollastonite or a combination comprising at least one of the foregoing mineral fillers;

wherein the nanosized filler is used in an amount of 0.01 to 30 wt% based on the total weight of the insulating layer; and

wherein the electrically insulating layer has a thickness of about 25 to about 300 micrometers and an electrical breakdown strength of greater than or equal to about 0.75 kilovolt."

Similarly, independent claim 30 (amended) of the instant invention recites an article of electrical component. The article comprising, *inter alia*, "an electrical component, the electrical component being an electrical conduction winding, stator bar, or a stator piece; and

an electrically insulating layer disposed upon the electrical component, wherein the electrically insulating layer comprises a thermosetting polymer, and a nanosized filler having an average largest dimension of less than or equal to about 75 nanometers;

wherein the nanosized filler comprises nanosized metal oxides wherein the nanosized metal oxides comprise calcium oxide, cerium oxide, magnesium oxide, titanium oxide, zinc oxide, silicon oxide, copper oxide, or a combination comprising at least one of the foregoing metal oxides, nanosized metal carbides or a combination comprising at least one of the foregoing metal oxides and metal carbides;

wherein the thermosetting polymer comprises polyurethanes, ~~phenolics~~, silicones, polycarbonates, polystyrenes, polyarylates, polyarylsulfones, polyethersulfones, polyphenylene sulfides, polysulfones, polytetrafluoroethylenes, polyetherketones, polyether etherketones, polyether ketone ketones, polybenzoxazoles, polyoxadiazoles, polybenzothiazinophenothiazines, polybenzothiazoles, polypyrazinoquinoxalines, polyquinoxalines, polybenzimidazoles, polyoxindoles, polyoxoisindolines, polydioxoisindolines, polytriazines, polypyridazines, polypiperazines, polypyridines, polypiperidines, polytriazoles, polypyrazoles, polycboranes, polyoxabicyclononanes, polydibenzofurans, polyphthalides, polyacetals, polyanhydrides, polyvinyl ethers, polyvinyl

thioethers, polyvinyl alcohols, polyvinyl ketones, polyvinyl halides, polyvinyl nitriles, polyvinyl esters, polysulfonates, polysulfides, polythioesters, polysulfonamides, polyureas, polyphosphazenes, polysilazanes, or combinations comprising at least one of the foregoing thermosetting polymers;

wherein the nanosized filler is used in an amount of 0.01 to 30 wt% based on the total weight of the insulating layer, and

wherein the electrically insulating layer has a thickness of about 25 to about 300 micrometers and an electrical breakdown strength of greater than or equal to about 0.75 kilovolt."

Independent claims 28 and 30 have each been amended as stated above to clearly recite the invention. No new subject matter has been added. Applicants respectfully submit that Markovitz reference does not teach or suggest the instant invention as stated in the amended independent claims 28 and 30.

Markovitz discloses resin binders of epoxy, polyester, and bismaleimides, and there is no suggestion in Markovitz that would lead one skilled in the art to include the resin claimed in the instant claims. Markovitz discloses in column 4, line 58 to column 5 line 41, suitable resin binders include solventless and solvent-containing epoxy, polyester and bismaleimide resins. However, it fails to disclose a resin composition described in amended claims 28 and 30.

Because Markovitz neither discloses nor suggests the invention recited by amended claims 28 and 30 and claims 29, 31 and 32 are dependent therefrom. For these reasons, the Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103(a).

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Summary

For the reasons set out above, Applicant respectfully submits that the application is in condition for allowance. Favorable reconsideration and allowance of the application are, therefore, respectfully requested.

If the Examiner believes that anything further is necessary to place the application in better condition for allowance, the Examiner is kindly asked to contact Applicant's undersigned representative at the telephone number below.

Respectfully submitted,

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